

## **SECTION 807 BREAKAWAY BASES - HIGHWAY LIGHTING**

### **807.01. DESCRIPTION.**

This work shall consist of furnishing materials and installing breakaway bases in accordance with these Specifications and in reasonably close conformity with the locations and dimensions shown on the Plans or established by the Engineer.

### **807.02. MATERIALS.**

Materials used shall meet the requirements of the following Specifications:

Cast Aluminum	ASTM B 26 or ASTM B 108 Alloy SG 70A T6 or Alloy 356F
Bolts, Nuts and Washers	Subsection 724.02
Adapter Plates	AASHTO M 183
Galvanized Hardware	AASHTO M 232
Galvanized Plates	AASHTO M 111

Breakaway bases furnished shall comply with AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, and be listed as approved by the FHWA.

### **807.04. CONSTRUCTION METHODS.**

Cast all cast aluminum transformer bases in a permanent mold, providing each with an approved plastic door.

Provide a bolt circle at the bottom of each base to match the bolt circle of the concrete footing, and a bolt circle at the top of the base to fit the bolt circle at the base of the pole.

The pole base shall not be larger than the top flange of the transformer base. Furnish the transformer base with four galvanized anchor washers 1/2 inch (13 mm) thick minimum, and shape it to conform to the bottom flange of the base. The top and bottom flanges of the base may be supplied with slotted anchor bolt holes. Provide each base with four machine bolts, four nuts, eight flat washers, and four lock washers—all galvanized—for connecting to the pole. These bolts shall be nominal 1 inch (25 mm) diameter for poles 40 foot (12.2 m) mounting height and less, and 1 1/4 inch (32 mm) nominal diameter for poles longer than 40 foot (12.2 m), up to and including 50 foot (15.2 m) mounting height. Level breakaway base poles only by use of shims.

*NOTE: Double nut leveling shall not be allowed.*

### **807.05. METHOD OF MEASUREMENT.**

The *breakaway base* of the size and type specified will be measured by each unit installed and shall include all nuts, bolts, washers, or adapter plates and other miscellaneous hardware.

**807.06. BASIS OF PAYMENT.**

Accepted quantities of breakaway bases, measured as provided above, will be paid for at the contract unit price as follows:

BREAKAWAY BASE ..... EACH

Such payment shall be full compensation for furnishing all materials, equipment, labor and incidentals required to complete the work as specified.

## **SECTION 808**

### **PIER MOUNTED POLE BRACKETS**

**808.01. DESCRIPTION.**

This work shall consist of furnishing materials and installing pier mounted pole brackets in accordance with these Specifications and in reasonably close conformity with the locations and dimensions shown on the Plans or established by the Engineer.

**808.02 . MATERIALS.**

Materials shall meet the requirements of the following Specifications.

Structural Steel	Section 724
Galvanizing	AASHTO M 111
Conduit	Section 709
Bolts, Nuts and Washers	Subsection 724.02

**808.04. CONSTRUCTION METHODS.**

Construct the brackets and install them on bridge piers in accordance with the details shown on the Plans. After all fabrication—such as cutting, welding, drilling, or punching—has been completed, galvanize the brackets.

**808.05. METHOD OF MEASUREMENT.**

*Pier mounted pole brackets* of the size and type specified will be measured by each unit installed and shall include all materials and hardware.

**808.06. BASIS OF PAYMENT.**

Accepted quantities of pier mounted pole brackets, measured as provided above, will be paid for at the contract unit price as follows:

PIER MOUNTED POLE BRACKET ..... EACH

Such payment shall be full compensation for furnishing all materials, equipment, labor, and incidentals required to complete the work as specified.